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NEWS 21 Aug 19 The MEDLINE file segment of TOXCENTER has been reloaded
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NEWS 23 Sep 03 JAPIO has been reloaded and enhanced
NEWS 24 Sep 16 Experimental properties added to the REGISTRY file
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NEWS 26 Sep 16 CA Section Thesaurus available in CAPLUS and CA
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=> s ophthalmic or eye
17131 OPHTHALMIC
34 OPHTHALMICS
17154 OPHTHALMIC
(OPHTHALMIC OR OPHTHALMICS)
134100 EYE
40017 EYES
154274 EYE
(EYE OR EYES)
L1 163839 OPHTHALMIC OR EYE

=> s 11 and 12

L3 42 L1 AND L2

=> d ti 1-42

L3 ANSWER 1 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Phosphatidylglycerol potently protects human retinal pigment epithelial cells against apoptosis induced by A2E, a compound suspected to cause age-related macula degeneration.

L3 ANSWER 2 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Epilepsy, EEG abnormalities, and sleep pattern in Mitochondrial Encephalomyopathies.

L3 ANSWER 3 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Statins, fibrates, and ocular myasthenia.

L3 ANSWER 4 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Alarming atrioventricular block and mitral valve prolapse in the Kearns-Sayre syndrome.

L3 ANSWER 5 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Prediction by FISH analysis of the occurrence of Wilms tumor in aniridia patients.

L3 ANSWER 6 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Inborn errors of complex II: Unusual human mitochondrial diseases.

L3 ANSWER 7 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI The expanding spectrum of nuclear gene mutations in mitochondrial disorders.

L3 ANSWER 8 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI alpha-Tocopherol/lipid ratio in blood is decreased in patients with Leber's hereditary optic neuropathy and asymptomatic carriers of the 11778 mtDNA mutation.

L3 ANSWER 9 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI The mitochondrial ND6 gene is a hot spot for mutations that cause Leber's hereditary optic neuropathy.

L3 ANSWER 10 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Does coenzyme Q10 play a role in opposing oxidative stress in patients with age-related macular degeneration.

L3 ANSWER 11 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Alpha-methylacyl-CoA racemase deficiency:AMACR (Massion-Verniory syndrome.

L3 ANSWER 12 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Transient improvement of pyruvate metabolism after coenzyme Q therapy in Kearns-Sayre syndrome: MRS study.

L3 ANSWER 13 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Cultured corneal keratocyte apoptosis induced by UV radiation is prevented by ubiquinone Q-10.

L3 ANSWER 14 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Behcet's disease associated with myelodysplastic syndrome: A case report.

L3 ANSWER 15 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Vitamin E and **coenzyme Q** concentrations in the thyroid
tissues of patients with various thyroid disorders.

L3 ANSWER 16 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Coordinate induction of energy gene expression in tissues of
mitochondrial
disease patients.

L3 ANSWER 17 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Functional consequences of the 3460-bp mitochondrial DNA mutation
associated with Leber's hereditary optic neuropathy.

L3 ANSWER 18 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Modulation of oxidative stress in human skin of old donors.

L3 ANSWER 19 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Biochemical features of mtDNA 14484 (ND6/M64V) point mutation associated
with Leber's hereditary optic neuropathy.

L3 ANSWER 20 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI The nuoM arg368his mutation in NADH:**ubiquinone** oxidoreductase
from Rhodobacter capsulatus: A model for the human nd4-11778 mtDNA
mutation associated with Leber's hereditary optic neuropathy.

L3 ANSWER 21 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Analysis of the pathogenic human mitochondrial mutation ND1/3460, and
mutations of strictly conserved residues in its vicinity, using the
bacterium *Paracoccus denitrificans*.

L3 ANSWER 22 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Diagnostic programme for respiratory chain diseases in Russia.

L3 ANSWER 23 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Human complex I defects in neurodegenerative diseases.

L3 ANSWER 24 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Human complex I deficiency: Clinical spectrum and involvement of oxygen
free radicals in the pathogenicity of the defect.

L3 ANSWER 25 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Changes in mitochondrial complex I activity and **coenzyme Q**
binding site in Leber's hereditary optic neuropathy (LHON).

L3 ANSWER 26 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Mutation analysis of the ND6 gene in patients with Lebers hereditary
optic
neuropathy.

L3 ANSWER 27 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Thermally-induced changes in the metabolism of the **eye** of the
crayfish *Paranephrops planifrons*: Respiration and substrate utilization
at
three distinct temperatures.

L3 ANSWER 28 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI NADH-**coenzyme Q** reductase (complex I) deficiency:
Heterogeneity in phenotype and biochemical findings.

L3 ANSWER 29 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Mitochondrial NADH-coenzyme Q reductase deficiency in Leigh's disease.

L3 ANSWER 30 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Improvement of Kearns-Sayre syndrome with controlled carbohydrate intake and coenzyme Q-10 therapy.

L3 ANSWER 31 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI An unusual patient with the neonatal Marfan phenotype and mitochondrial complex I deficiency.

L3 ANSWER 32 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI A case of Kearns-Shy syndrome with later onset.

L3 ANSWER 33 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI THE PROPERTIES OF PHOTORECONVERTIBLE FLUOROPHORE SYSTEMS IN INSECT EYES RESEMBLE THOSE OF QUINONES.

L3 ANSWER 34 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI EFFECT OF COENZYME Q-10 ON HEMODYNAMIC RESPONSE TO OCULAR TIMOLOL.

L3 ANSWER 35 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI THE INFLUENCE OF TEMPERATURE AND OXYGEN ON THE PHOTOMECHANICAL SYSTEM OF THE MEAL MOTH EYE.

L3 ANSWER 36 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI ANESTHESIA FOR EYE SURGERY IN CASES OF MITOCHONDRIAL ENCEPHALOMYOPATHY.

L3 ANSWER 37 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI TEMPERATURE DEPENDENCE DARK ADAPTATION AND THE DYNAMICS OF PHOTOTRANSDUCTION IN DIPTERAN PHOTORECEPTORS.

L3 ANSWER 38 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI RESPONSES OF NONDIAPAUSING FLESH FLIES DIPTERA SARCOPHAGIDAE TO LOW REARING TEMPERATURES DEVELOPMENTAL RATE COLD TOLERANCE AND GLYCEROL CONCENTRATIONS.

L3 ANSWER 39 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI CLOSED-LID FACTORS INFLUENCING HUMAN CORNEAL OXYGEN DEMAND.

L3 ANSWER 40 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI EXPERIMENTAL STUDIES ON ANTIOXIDATIVE EFFECT OF COENZYME Q-10 ON THE RETINA.

L3 ANSWER 41 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI SPECTRAL SENSITIVITY IN INSECT CALLIPHORO-ERYTHROCEPHALA PHOTORECEPTORS AT A RANGE OF TEMPERATURES.

L3 ANSWER 42 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI CIRCADIAN RHYTHM OF OUTPUT FROM NEURONS IN THE EYE OF APLYSIA PART 2 EFFECTS OF DEUTERIUM OXIDE AND TEMPERATURE.

=> d bib ab 1 10 13 34 40

L3 ANSWER 1 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

AN 2002:574673 BIOSIS
DN PREV200200574673
TI Phosphatidylglycerol potently protects human retinal pigment epithelial cells against apoptosis induced by A2E, a compound suspected to cause age-related macula degeneration.
AU Shaban, Hamdy; Borras, Consuelo; Vina, Jose; Richter, Christoph (1)
CS (1) Institute of Biochemistry, Swiss Federal Institute of Technology (ETH), Universitaetstr. 16, CH-8092, Zurich: richter@bc.biol.ethz.ch Switzerland
SO Experimental Eye Research, (July, 2002) Vol. 75, No. 1, pp. 99-108.
<http://www.academicpress.com/eer>. print.
ISSN: 0014-4835.
DT Article
LA English
AB Age-related macular degeneration (AMD) affects about one fifth of the population older than 65 years and is one of the main causes of poor vision in the elderly in industrialized nations. The endogenous lipophilic and cationic compound N-retinyl-N-retinylidene ethanolamine (A2E) is suspected to cause the dry form of the disease, which currently cannot be treated. The authors recently reported that A2E induces apoptosis in several cell types including porcine retinal pigment epithelial cells, detaches proapoptotic proteins from mitochondria, and inhibits cytochrome c oxidase. A2E acts primarily at the level of cardiolipin/cytochrome c oxidase, which in the light becomes permanently inactivated by A2E. The authors now report that A2E at low concentrations causes apoptosis in cultured human retinal pigment epithelial cells. These cells are more sensitive to A2E in the light than in the dark. Phosphatidylglycerol, a negatively charged phospholipid and immediate biosynthetic precursor of cardiolipin readily inhibits apoptosis. Exposure of cells to A2E results in the formation of reactive oxygen and nitrogen species, and exposure of mitochondria to A2E results in oxidative stress. Accordingly, the potent antioxidant coenzyme Q also protects cells against A2E-induced apoptosis. These findings are highly relevant for the treatment and/or prevention of AMD.

*Not
Date*

L3 ANSWER 10 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 2001:64412 BIOSIS
DN PREV200100064412
TI Does coenzyme Q10 play a role in opposing oxidative stress in patients with age-related macular degeneration.
AU Blasi, Maria Antonietta; Bovina, Carla; Carella, Giuseppe; Genova, Maria Luisa; Jansen, Anna M. A.; Lenaz, Giorgio; Brancato, Rosario (1)
CS (1) Department of Ophthalmology and Visual Science, San Raffaele Hospital, University of Milano, Via Olgettina 60, I-20132, Milano:
brancato.rosario@hsr.it Italy
SO Ophthalmologica, (January February, 2001) Vol. 215, No. 1, pp. 51-54.
print.
ISSN: 0030-3755.
DT Article
LA English
SL English
AB To seek some specific biochemical markers of age-related macular degeneration (AMD), coenzyme Q10 (CoQ10) levels were determined in plasma and platelets from 19 exudative AMD patients and 19 age-matched controls. Lipid peroxidation was followed in plasma in vitro after the addition of a free radical initiator. Most patients had lower plasma CoQ10 content than most controls. Plasma from controls showed greater capacity

*Not
Date*

to oppose the oxidative damage. These results support the concept that free radicals play a pathogenic role in AMD and that CoQ10 may have a protective effect.

L3 ANSWER 13 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 2000:263378 BIOSIS
DN PREV200000263378
TI Cultured corneal keratocyte apoptosis induced by UV radiation is prevented by ubiquinone Q-10.
AU Carella, G. (1); Capaccioli, S.; Brancato, R. (1); Donnini, M.; Lapucci, A.; Papucci, L.; Schiavone, N.; Cutri, M.; Formigli, L.; Orlandini, S. Zecchi
CS (1) Department of Ophthalmology and Visual Sciences, University Hospital San Raffaele, Milan Italy
SO IOVS, (March 15, 2000) Vol. 41, No. 4, pp. S697. print..
Meeting Info.: Annual Meeting of the Association in Vision and Ophthalmology. Fort Lauderdale, Florida, USA April 30-May 05, 2000
Association for Research in Vision and Ophthalmology

DT Conference
LA English
SL English

L3 ANSWER 34 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 1989:478937 BIOSIS
DN BA88:114697
TI EFFECT OF COENZYME Q-10 ON HEMODYNAMIC RESPONSE TO OCULAR TIMOLOL.
AU TAKAHASHI N; IWASAKA T; SUGIURA T; ONOYAMA H; KURIHARA S; INADA M; MIKI H; UYAMA M
CS CCU, KANSAI MED. UNIV. I, FUMIZONO-CHO, MORIGUCHI CITY, OSAKA 70, JPN.
SO J CARDIOVASC PHARMACOL, (1989) 14 (3), 462-468.
CODEN: JCPCDT. ISSN: 0160-2446.
FS BA; OLD
LA English
AB Coenzyme Q10 (CoQ10) is an essential component of the mitochondrial membrane and plays an important role in the maintenance of normal cardiac function. To evaluate the effects of ocular timolol on the cardiovascular system and determine the protective effect of CoQ10, 16 patients with glaucoma were studied using impedance cardiography. Following instillation of 1 mg timolol maleate in each eye, heart rate (HR) and stroke index (SI) decreased, and total peripheral resistance index (TPRI) increased significantly. Reexamination was performed after 6 weeks of 90 mg oral CoQ10. Despite decreases in HR, percent changes in HR were significantly less after CoQ10 at 120 min. Stroke index showed an initial increase which was not observed without CoQ10. These data suggest that CoQ10 delayed the appearance of inotropic blockade of timolol and hastened the disappearance of chronotropic blockade. Additional study of six normal volunteers with 6 weeks of oral CoQ10 showed a similar decrease of intraocular pressure after timolol instillation as compared to those without CoQ10. Thus, administration of oral CoQ10 in patients receiving ocular timolol may be useful in mitigating cardiovascular side effects without affecting intraocular pressure in the treatment of glaucoma.

L3 ANSWER 40 OF 42 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 1985:421029 BIOSIS
DN BA80:91021

TI EXPERIMENTAL STUDIES ON ANTIOXIDATIVE EFFECT OF COENZYME
Q-10 ON THE RETINA.

AU KUWAYAMA M

CS DEP. OPHTHALMOL., NAGOYA CITY UNIV. MED. SCH., MIZUHO-KU, NAGOYA 467.

SO NAGOYA MED J, (1984 (RECD 1985)) 29 (3-4), 137-148.

CODEN: NMJOAA. ISSN: 0027-7649.

FS BA; OLD

LA English

AB The lipid peroxide level in the chick retina was examined under various conditions in vitro and in vivo to verify the antioxidative effect of coenzyme Q10 (CoQ10). The levels of CoQ10 in the retina, liver and heart were 8.4 .mu.g/g, 82.3 .mu.g/g and 74.9 .mu.g/g wet wt, respectively. In the suspension of retina only, CoQ10 exhibited no antioxidative effects, but in the retina mixed with chick heart mitochondria CoQ10 showed marked inhibition of lipid peroxidation as strong as that by dl-.alpha.-tocopherol. CoQ10 can act as an antioxidant in mitochondria; the antioxidative effect of CoQ10 displays organ specificity. Sixty kittens were administered a high concentration (70 .+- . 1%) of O₂ for 48 h from day 3 after birth. In 11 kittens s.c., administered 10 mg of CoQ10 (group A), retinopathy of prematurity (ROP) was detected in 18 of 22 eyes. In 7 kittens receiving an equal volume of a vehicle placebo (group B), ROP was detected in 13 of 14 eyes. There was no significant difference between groups A and B. In 23 kittens given 5 mg of CoQ10 and 12.5 mg of tocopherol acetate (group C), ROP was seen only in 11 of 46 eyes. In 19 kitten administered an equal volume of a vehicle placebo and 12.5 mg of tocopherol acetate (group D), ROP was seen in 31 of 38 eyes. The retina in which ROP developed showed a high level of lipid peroxide than that in the normal retina.

(a)

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L1 163839 S OPHTHALMIC OR EYE
L2 8165 S UBIQUINONE OR Q10 OR (COENZYME Q)
L3 42 S L1 AND L2

FILE 'CAPLUS' ENTERED AT 13:40:01 ON 19 NOV 2002

=> s 13

6757 OPHTHALMIC
43 OPHTHALMICS
6772 OPHTHALMIC
(OPHTHALMIC OR OPHTHALMICS)

83966 EYE
16958 EYES
89997 EYE
(EYE OR EYES)
6226 UBIQUINONE
2851 UBIQUINONES
7203 UBIQUINONE
(UBIQUINONE OR UBIQUINONES)
4156 Q10
25335 COENZYME
5276 COENZYMES
28167 COENZYME
(COENZYME OR COENZYMES)

139242 Q
1754 COENZYME Q
(COENZYME (W) Q)

L4 123 L1 AND L2

=> d ti 1-123

L4 ANSWER 1 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Sequence analysis of the complete mitochondrial genome in patients with Leber's hereditary optic neuropathy lacking the three most common pathogenic DNA mutations

L4 ANSWER 2 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Use of **ubiquinone** for production of an agent for prevention and treatment of senile macular degeneration

L4 ANSWER 3 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI A mutational hot spot in the mitochondrial ND6 gene in patients with Leber's hereditary optic neuropathy

L4 ANSWER 4 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Preparation of fused pyridine derivatives as HMG-CoA reductase inhibitors

L4 ANSWER 5 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Monitoring of the oxidative stress of aging and aging-related diseases

L4 ANSWER 6 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Pyrimidine nucleotide precursors for the treatment of mitochondrial diseases

L4 ANSWER 7 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Novel antioxidants

L4 ANSWER 8 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Diagnosis and therapy of diseases by detection of single nucleotide polymorphism and cytosine methylation in chemically modified genomic DNA

L4 ANSWER 9 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Epiandrosterones or **ubiquinones** for treatment of asthma and reduction of adenosine/adenosine receptor levels

L4 ANSWER 10 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI A regulatory gene for bone strength and mineralization and its use in the diagnosis and treatment of osteoporosis

L4 ANSWER 11 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Leber's Hereditary Optic Neuropathy - The Spectrum of Mitochondrial DNA Mutations in Chinese Patients

L4 ANSWER 12 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Proteins and nucleic acids associated with aging and their detection in identification of tissues undergoing senescence and of senescence modulators

L4 ANSWER 13 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Topical pharmaceutical composition containing water-insoluble and/or sparingly water-soluble drugs

L4 ANSWER 14 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Topical micronutrient delivery system using esters

L4 ANSWER 15 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Meso-zeaxanthin formulations for treatment of retinal disorders

L4 ANSWER 16 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Reduced form of **coenzyme Q** in highly bioavailable stable dosage forms

L4 ANSWER 17 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Local synthesis of nuclear-encoded mitochondrial proteins in the presynaptic nerve terminal

L4 ANSWER 18 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI **Ubiquinone Q10** for a local treatment and prevention of ophthalmological pathologies following photorefractive therapy, refractive surgery and exposure to ultraviolet radiation

L4 ANSWER 19 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Oil-in-water emulsion compositions for polyfunctional active ingredients

L4 ANSWER 20 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Pharmaceutically active carotenoids

L4 ANSWER 21 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI A pharmaceutical composition for stabilising atherosclerotic plaques

L4 ANSWER 22 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Does coenzyme Q10 play a role in opposing oxidative stress in patients with age-related macular degeneration?

L4 ANSWER 23 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Pharmaceutical and nutritional compositions containing essential fatty acids and homocysteine-lowering agents

L4 ANSWER 24 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Functional analysis of lymphoblast and cybrid mitochondria containing the 3460, 11778, or 14484 Leber's hereditary optic neuropathy mitochondrial DNA mutation

L4 ANSWER 25 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Expanded polyglutamines induce neurodegeneration and trans-neuronal alterations in cerebellum and retina of SCA7 transgenic mice

L4 ANSWER 26 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Treatment, imaging and diagnosis of disease using an agent which binds .alpha.5-integrin

L4 ANSWER 27 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Methods for identifying agents that inhibit serum aging factors (NADH oxidase) and uses and compositions thereof

L4 ANSWER 28 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Late-onset optic atrophy, ataxia, and myopathy associated with a mutation of a complex II gene

L4 ANSWER 29 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Pharmaceutical, dietetic and cosmetic compositions based on tioctic acid and cysteine

L4 ANSWER 30 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Methods using pyrimidine-based nucleosides for treatment of mitochondrial disorders

L4 ANSWER 31 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Combined dehydroepiandrosterone and retinoid therapy for epithelial disorders

L4 ANSWER 32 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Low brain intracellular free magnesium in mitochondrial cytopathies

L4 ANSWER 33 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Defined serum-free medical solution for ophthalmology

L4 ANSWER 34 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Ubiquinone-containing composition suitable for promoting enhanced intramitochondrial transport

L4 ANSWER 35 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Mitochondrial DNA mutations in complex I and tRNA genes in Parkinson's disease

L4 ANSWER 36 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Glutamate-mediated inhibition of oxidative phosphorylation in cultured retinal cells

L4 ANSWER 37 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI The mitochondrial DNA G13513A transition in ND5 is associated with a LHON/MELAS overlap syndrome and may be a frequent cause of MELAS

L4 ANSWER 38 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Familial multisystem degeneration with parkinsonism associated with the 11778 mitochondrial DNA mutation

L4 ANSWER 39 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI In vitro testing of antioxidants and biochemical end-points in bovine retinal tissue

L4 ANSWER 40 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Leber's hereditary optic neuropathy: clinical and molecular genetic findings in a patient with a new mutation in the ND6 gene

L4 ANSWER 41 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Novel mutations of mitochondrial complex I in pathologically proven Parkinson disease

L4 ANSWER 42 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Coordinate induction of energy gene expression in tissues of mitochondrial disease patients

L4 ANSWER 43 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Functional consequences of the 3460-bp mitochondrial DNA mutation associated with Leber's hereditary optic neuropathy

L4 ANSWER 44 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Titrating the effects of mitochondrial complex I impairment in the cell physiology

L4 ANSWER 45 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Improved personal care formulations containing amphiphilic phospholipid carriers for topical mucosal applications

L4 ANSWER 46 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Biochemical features of mtDNA 14484 (ND6/M64V) point mutation associated with Leber's hereditary optic neuropathy

L4 ANSWER 47 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Oral liposomal delivery system

L4 ANSWER 48 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Nitrosylation to inactivate apoptotic enzymes, and therapeutic caspase-like peptide

L4 ANSWER 49 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Compositions and methods for prevention and treatment of vascular degenerative diseases

L4 ANSWER 50 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Analysis of the Pathogenic Human Mitochondrial Mutation ND1/3460, and Mutations of Strictly Conserved Residues in Its Vicinity, Using the Bacterium *Paracoccus denitrificans*

L4 ANSWER 51 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI The nuoM arg368his mutation in NADH:**ubiquinone** oxidoreductase from *Rhodobacter capsulatus*: a model for the human nd4-11778 mtDNA

mutation associated with Leber's hereditary optic neuropathy

L4 ANSWER 52 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Mitochondrial gene defect in patients with chronic progressive external ophthalmoplegia

L4 ANSWER 53 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Exhaustive scanning approach to screen all the mitochondrial tRNA genes for mutations and its application to the investigation of 35 independent patients with mitochondrial disorders

L4 ANSWER 54 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Multiple mtDNA deletions features in autosomal dominant and recessive diseases suggest distinct pathogeneses

L4 ANSWER 55 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Plus/minus screening of rabbit corneal endothelial cDNA library

L4 ANSWER 56 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Sporadic heteroplasmic single 5.5 kb mitochondrial DNA deletion associated with cerebellar ataxia, hypogonadotropic hypogonadism, choroidal dystrophy, and mitochondrial respiratory chain complex I deficiency

L4 ANSWER 57 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Leber's hereditary optic neuropathy: biochemical effect of 11778/ND4 and 3460/ND1 mutations and correlation with the mitochondrial genotype

L4 ANSWER 58 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Mutation analysis of the ND6 gene in patients with Lebers hereditary optic neuropathy

L4 ANSWER 59 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Haplotype and phylogenetic analyses suggest that one European-specific mtDNA background plays a role in the expression of Leber hereditary optic neuropathy by increasing the penetrance of the primary mutations 11778 and 14484

L4 ANSWER 60 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Thermally-induced changes in the metabolism of the eye of the crayfish *Paranephrops planifrons*: respiration and substrate utilization at three distinct temperatures

L4 ANSWER 61 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Expression of oxidative phosphorylation genes in muscle cell cultures from patients with mitochondrial myopathies

L4 ANSWER 62 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI High dosage lutein and zeaxanthin for macula therapy

L4 ANSWER 63 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Mitochondrial DNA mutations associated with the 11778 mutation in Leber's disease

L4 ANSWER 64 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Sequence of mitochondrial DNA in patients with multiple sclerosis

L4 ANSWER 65 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Catalytic activity of Complex I in cell lines that possess replacement mutations in the ND genes in Leber's hereditary optic neuropathy

L4 ANSWER 66 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Respiration and growth defects in transmtochondrial cell lines carrying the 11778 mutation associated with Leber's hereditary optic neuropathy

L4 ANSWER 67 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Defects of the respiratory chain in various tissues of old monkeys: A cytochemical-immunocytochemical study

L4 ANSWER 68 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Genetic and biochemical impairment of mitochondrial complex I activity in a family with Leber hereditary optic neuropathy and hereditary spastic dystonia

L4 ANSWER 69 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Longitudinal study of a heteroplasmic 3460 Leber hereditary optic neuropathy family by multiplexed primer-extension analysis and nucleotide sequencing

L4 ANSWER 70 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Use of transmtochondrial cybrids to assign a complex I defect to the mitochondrial DNA-encoded NADH dehydrogenase subunit 6 gene mutation at nucleotide pair 14459 that causes Leber hereditary optic neuropathy and dystonia

L4 ANSWER 71 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Phylogenetic analysis of Leber's hereditary optic neuropathy mitochondrial DNA's indicates multiple independent occurrences of the common mutations

L4 ANSWER 72 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Preoptic/anterior hypothalamic neurons: thermosensitivity in rapid eye movement sleep

L4 ANSWER 73 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Leber's hereditary optic neuropathy (LHON)-related mitochondrial DNA sequence changes in Italian patients presenting with sporadic bilateral optic neuritis

L4 ANSWER 74 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Effect of diabetes and dietary **ubiquinone** supplementation on the post-translational modification of rat lens β .L crystallin

L4 ANSWER 75 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Leber's hereditary optic neuropathy plus dystonia is caused by a mitochondrial DNA point mutation

L4 ANSWER 76 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Fine mapping of randomly distributed multiple deletions of mitochondrial DNA in a case of chronic progressive external ophthalmoplegia

L4 ANSWER 77 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Human diseases with defects in oxidative phosphorylation. 1. Decreased amounts of assembled oxidative phosphorylation complexes in mitochondrial encephalomyopathies

L4 ANSWER 78 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Functional alterations of the mitochondrialy encoded ND4 subunit associated with Leber's hereditary optic neuropathy

L4 ANSWER 79 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Method of preventing NMDA receptor complex-mediated neuronal damage with nitroso compound

L4 ANSWER 80 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Time-resolved fluorometry in the diagnosis of Leber hereditary optic neuroretinopathy

L4 ANSWER 81 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Sequence homology of NADH CoQ reductase subunit IV with nucleotide-requiring enzymes

L4 ANSWER 82 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Scale-inhibiting agents for vinyl chloride-type compound polymerization apparatus

L4 ANSWER 83 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Nonviability of cells with oxidative defects in galactose medium: a screening test for affected patient fibroblasts

L4 ANSWER 84 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Leber's hereditary optic neuropathy and complex I deficiency in muscle

L4 ANSWER 85 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Leber hereditary optic neuropathy: identification of the same mitochondrial NDI mutation in six pedigrees

L4 ANSWER 86 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Identification and characterization of the enzymic activity of .zeta.-crystallin from guinea pig lens. A novel NADPH:quinone oxidoreductase

L4 ANSWER 87 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Electron transfer properties of NADH:**ubiquinone** reductase in the ND1/3460 and the ND4/11778 mutations of the Leber hereditary optic neuroretinopathy (LHON)

L4 ANSWER 88 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Leber hereditary optic neuropathy: involvement of the mitochondrial ND1 gene and evidence for an intragenic suppressor mutation

L4 ANSWER 89 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Biochemical and molecular aspects of human mitochondrial respiratory chain disorders

L4 ANSWER 90 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Spontaneous Kearns-Sayre/chronic external ophthalmoplegia plus syndrome associated with a mitochondrial DNA deletion: a slip-replication model and metabolic therapy

L4 ANSWER 91 OF 123 CAPLUS COPYRIGHT 2002 ACS
TI Antiglaucoma pharmaceuticals containing xanthine oxidase inhibitors and free radical scavengers and iron chelating agents

L4 ANSWER 92 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI Mitochondrial DNA polymorphism in Finnish families with Leber's hereditary optic neuroretinopathy

L4 ANSWER 93 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI A defect in mitochondrial electron-transport activity (NADH-coenzyme Q oxidoreductase) in Leber's hereditary optic neuropathy

L4 ANSWER 94 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI Kinetics, binding constant, and activation energy of the 48-kDa protein-rhodopsin complex by extra-metarhodopsin II

L4 ANSWER 95 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI Studies on the optimized requirement of daily protein intake. A basic enzymological study on the regulation of endogenous arginine synthesis

L4 ANSWER 96 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI Brain and optic system pathology in hypcholesterolemic dogs treated with a competitive inhibitor of 3-hydroxy-3-methylglutaryl coenzyme A reductase

L4 ANSWER 97 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI Actions of coenzyme Q₁₀ on sympathetic pre- and post-synaptic sites in the heart. Especially, prevention and protection on cardiac injury after tooth extraction in guinea pigs

L4 ANSWER 98 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI Experimental studies on antioxidative effect of coenzyme Q₁₀ on the retina

L4 ANSWER 99 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI Antioxidant activity of coenzyme Q₁₀ in the retina.

L4 ANSWER 100 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI A barrier to lateral diffusion of porphyropsin in *Necturus* rod outer segment disks

L4 ANSWER 101 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI Studies on the effect of coenzyme Q₁₀ against oxidation in the retina

L4 ANSWER 102 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI Nonpolar lipid methylation. Identification of nonpolar methylated products synthesized by rat basophilic leukemia cells, retina, and parotid

L4 ANSWER 103 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI Lateral diffusion of rhodopsin in photoreceptor cells measured by fluorescence photobleaching and recovery

L4 ANSWER 104 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI Glucose metabolism in the cornea and lens in elasmobranchs, teleosts and mammals: response to thiol-oxidation

L4 ANSWER 105 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI Ionic and metabolic requirements for high-affinity choline uptake and acetylcholine synthesis in nerve terminals at a neuromuscular junction

L4 ANSWER 106 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI Effects of variations in the perfusate on the ERG and discharge of ganglion cells in carp retina

L4 ANSWER 107 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI Oxygen consumption in the developing chick cornea

L4 ANSWER 108 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI Visual pigment changes in rainbow trout in response to temperature

L4 ANSWER 109 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI Mechanism of chloroquine transport in the isolated retina

L4 ANSWER 110 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI Contribution of secretion and filtration to aqueous humor formation

L4 ANSWER 111 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI Effects of temperature on axonal transport and turnover of protein in goldfish optic system

L4 ANSWER 112 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI Efflux of sodium-22 and rubidium-86 from the crystalline lens

L4 ANSWER 113 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI Pectin methyl esterase activity in Southern peas (*Vigna sinensis*)

L4 ANSWER 114 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI Metabolism of zinc-65 in euphausiids

L4 ANSWER 115 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI **Ubiquinone** in the retina

L4 ANSWER 116 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI Selenium and coenzyme Q10 levels in the tissues of dystrophic and healthy calves

L4 ANSWER 117 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI Dark-adaptation processes in the rhodopsin rods of frog's retina

L4 ANSWER 118 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI Cytochemical localization of redox compounds in isolated bovine retinal outer segment disks

L4 ANSWER 119 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI Preliminary observations on the lipids of bovine retinal outer segment disks

L4 ANSWER 120 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI The distribution of ions in the smooth muscle of the guinea pig taenia coli.

L4 ANSWER 121 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI Cytochemical localization of **ubiquinones** in the retina

L4 ANSWER 122 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI Oxygen consumption of the insect retina in the light and darkness

L4 ANSWER 123 OF 123 CAPLUS COPYRIGHT 2002 ACS

TI The effect of temperature upon facet number in the bar-eyed mutant of *Drosophila*. III

=> d bib ab 2 13 18 19 22 33 34 39 47 49 62 74 98 99 101

L4 ANSWER 2 OF 123 CAPLUS COPYRIGHT 2002 ACS
AN 2002:481193 CAPLUS
DN 137:24302
TI Use of **ubiquinone** for production of an agent for prevention and treatment of senile macular degeneration
IN Brancato, Rosario; Lenaz, Giorgio; Blasi, Maria Antonietta; Simonelli, Emanuele
PA Italy
SO Ital., 27 pp.
CODEN: ITXXBY
DT Patent
LA Italian
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|----------|
| PI | IT 1299578 | B1 | 20000316 | IT 1998-RM494 | 19980724 |
| AB | The present invention refers to the use of ubiquinones (including coenzyme Q10) for manuf. of pharmaceuticals which can be used to prevent or treat macular degeneration assocd. with old age. The dosage of ubiquinone should exceed 20 mg/day. Macular degeneration appears to result from active oxygen activity in the retina, and the antioxidant activity of coenzyme Q10 appears to be able to counteract this. | | | | |

L4 ANSWER 13 OF 123 CAPLUS COPYRIGHT 2002 ACS
AN 2001:935374 CAPLUS
DN 136:42890
TI Topical pharmaceutical composition containing water-insoluble and/or sparingly water-soluble drugs
IN Kloecker, Norbert
PA Audit Institute for Medical Services and Quality Assurance G.m.b.H., Germany
SO PCT Int. Appl., 12 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|-------------------|------------------|-------------------|
| PI | WO 2001097774 | A2 | <u>2001/12/27</u> | WO 2001-EP7036 | <u>2001/06/21</u> |
| | WO 2001097774 | A3 | 20020620 | | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| | DE 10030378 | A1 | 20020314 | DE 2000-10030378 | 20000621 |

PRAI DE 2000-10030378 A 20000621
AB The invention relates to a topical pharmaceutical compn. for the application to the **eye**, comprising at least 1 water-insol. or sparingly water-sol. drug dissolved in neutral oil. The compn. can be filtered under sterile conditions and is stable. The pharmaceutical compn. can be applied to the **eye** and the surrounding mucous

membranes and tissues by means of devices that produce an exactly defined dose and no preservatives and/or emulsifiers have to be added. Thus, 193 mg scopolamine was dissolved in 100 mL Miglyol-840 and the oily soln. was filtered and can be used for the topical application.

L4 ANSWER 18 OF 123 CAPLUS COPYRIGHT 2002 ACS
AN 2001:396683 CAPLUS
DN 135:10033
TI **Ubiquinone Q10** for a local treatment and prevention of ophthalmological pathologies following photorefractive therapy, refractive surgery and exposure to ultraviolet radiation
IN Brancato, Rosario; Capaccioli, Sergio; Saettone, Marco Fabrizio; Schiavone, Nicola
PA Simonelli, Giuseppe, Italy
SO PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|--|----------|-----------------|----------|
| PI | WO 2001037851 | A2 | 20010531 | WO 2000-IT434 | 20001030 |
| | WO 2001037851 | A3 | 20020321 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| | IT 1307281 | B1 | 20011030 | IT 1999-RM719 | 19991125 |
| | EP 1231909 | A2 | 20020821 | EP 2000-974804 | 20001030 |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL | | | |
| PRAI | IT 1999-RM719 | A | 19991125 | | |
| | WO 2000-IT434 | W | 20001030 | | |
| AB | In the treatment of ophthalmol. pathologies in general and in particular in the treatment and prevention of side-effects on eye following photorefractive therapy (PRK), laser-assisted in situ keratomileusis (LASIK) and exposure to solar light and UV radiation, ubiquinone Q10 is utilized in a collyrium pharmaceutical prepn. for ocular topical administration thereof. Thus, a formulation contained ubiquinone 0.20, tocopherol 0.04, PEG-PPG copolymer 10.00, modified castor oil 5.00, NaCl 0.45, benzalkonium chloride 0.01, and water qs to 100.0%. | | | | |
| L4 | ANSWER 19 OF 123 CAPLUS COPYRIGHT 2002 ACS | | | | |
| AN | 2001:300514 CAPLUS | | | | |
| DN | 134:331617 | | | | |
| TI | Oil-in-water emulsion compositions for polyfunctional active ingredients | | | | |
| IN | Chen, Feng-jing; Patel, Mahesh V. | | | | |
| PA | Lipocene, Inc., USA | | | | |
| SO | PCT Int. Appl., 82 pp. | | | | |
| | CODEN: PIXXD2 | | | | |
| DT | Patent | | | | |
| LA | English | | | | |

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|----------|
| PI | WO 2001028555 | A1 | 20010426 | WO 2000-US28835 | 20001018 |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| | US 2002107265 | A1 | 20020808 | US 1999-420159 | 19991018 |

PRAI US 1999-420159 A 19991018

AB Pharmaceutical oil-in-water emulsions for delivery of polyfunctional active ingredients with improved loading capacity, enhanced stability, and reduced irritation and local toxicity are described. Emulsions include an aq. phase, an oil phase comprising a structured triglyceride, and an emulsifier. The structured triglyceride of the oil phase is substantially free of triglycerides having three medium chain (C6-C12) fatty acid moieties, or a combination of a long chain triglyceride and a polarity-enhancing polarity modifier. The present invention also provides methods of treating an animal with a polyfunctional active ingredient, using dosage forms of the pharmaceutical emulsions. For example, an emulsion was prep'd., with cyclosporin A as the polyfunctional active ingredient dissolved in an oil phase including a structured triglyceride (Captex 810D) and a long chain triglyceride (safflower oil). The compn. contained (by wt.) cyclosporin A 1.0, Captex 810D 5.0, safflower oil 5.0, BHT 0.02, egg phospholipid 2.4, dimyristoylphosphatidyl glycerol 0.2, glycerol 2.25, EDTA 0.01, and water up to 100%, resp.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 22 OF 123 CAPLUS COPYRIGHT 2002 ACS
AN 2001:79062 CAPLUS
DN 135:32250
TI Does coenzyme Q10 play a role in opposing oxidative stress in patients with age-related macular degeneration?
AU Blasi, Maria Antonietta; Bovina, Carla; Carella, Giuseppe; Genova, Maria Luisa; Jansen, Anna M. A.; Lenaz, Giorgio; Brancato, Rosario
CS Department of Ophthalmology, University of L'Aquila, L'Aquila, Italy
SO Ophthalmologica (2001), 215(1), 51-54
CODEN: OPHTAD; ISSN: 0030-3755
PB S. Karger AG
DT Journal
LA English
AB To seek some specific biochem. markers of age-related macular degeneration (AMD), coenzyme Q10 (CoQ10) levels were detd. in plasma and platelets from 19 exudative AMD patients and 19 age-matched controls. Lipid peroxidn. was followed in plasma in vitro after the addn. of a free radical initiator. Most patients had lower plasma CoQ10 content than most controls. Plasma from controls showed greater capacity to oppose the oxidative damage. These results support the concept that free radicals

play a pathogenic role in AMD and that CoQ10 may have a protective effect.

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 33 OF 123 CAPLUS COPYRIGHT 2002 ACS
AN 2000:335023 CAPLUS
DN 132:339428
TI Defined serum-free medical solution for ophthalmology
IN Skelnik, Debra A.
PA Bausch and Lomb Surgical, Inc., USA
SO Eur. Pat. Appl., 27 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | EP 1000541 | A1 | 20000517 | EP 1999-308702 | 19991102 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| | US 6153582 | A | 20001128 | US 1998-186580 | 19981105 |
| | AU 9957108 | A1 | 20000511 | AU 1999-57108 | 19991028 |
| | JP 2000198701 | A2 | 20000718 | JP 1999-313063 | 19991102 |
| PRAI | US 1998-186580 | A | 19981105 | | |

AB The title soln. contains one or more cell nutrient supplements and a growth factor which maintains and enhances the preservation of **eye** tissues, including human corneal, retinal, and corneal epithelial tissues at low to physiol. temp. (2-38.degree.). This soln. is composed of a defined aq. nutrient and electrolyte soln., supplemented with glycosaminoglycans, deturgescents agents, energy sources, buffer systems, antioxidants, membrane stabilizers, antibiotics, antimycotics, ATP or energy precursors, nutrient cell supplements, nonessential amino acids, trace minerals, trace elements, and growth factors.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 34 OF 123 CAPLUS COPYRIGHT 2002 ACS
AN 2000:277847 CAPLUS
DN 132:298849
TI **Ubiquinone**-containing composition suitable for promoting enhanced intramitochondrial transport
IN Feher, Janos; Sears, Grazia
PA Sigma-Tau Healthscience S.p.A., Italy
SO PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|-----------------|-----------------|----------|
| PI | WO 2000/023069 | A1 | <u>20000427</u> | WO 1999-IT331 | 19991019 |
| | W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, | | | | |

CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
IT 1304406 B1 20010319 IT 1998-BO596 19981021
IT 98BO0596 A1 20000421
EP 1123093 A1 20010816 EP 1999-954343 19991019
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO
US 6417233 B1 20020709 US 2001-807918 20010523
PRAI IT 1998-BO596 A 19981021
WO 1999-IT331 W 19991019
AB A compn. comprises a lipid-sol. benzoquinone, e.g., coenzyme Q10 and at least 1 .omega.-3 polyunsatd. fatty acid selected from the group consisting of eicosapentaenoic acid (EPA), docosahexaenoic acid (DHA) and linoleic acid (LNA), for the prevention and/or treatment of mitochondrialopathy. Thus, capsules contained EPA 148.72, DHA 105.82, LNA 31.46, coenzyme Q10 10.00, proteins 137.00, and carbohydrates 63.00 mg. Thus, coenzyme Q10 + vitamin E in a vehicle of highly concd. polyunsatd. fatty acids improved retinal function, primarily the regeneration of photoreceptor cells in normal conditions and in diseases states.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 39 OF 123 CAPLUS COPYRIGHT 2002 ACS
AN 1999:667869 CAPLUS
DN 131:307081
TI In vitro testing of antioxidants and biochemical end-points in bovine retinal tissue
AU Chida, Miho; Suzuki, K.; Nakanishi-Ueda, T.; Ueda, T.; Yasuhara, H.; Koide, R.; Armstrong, D.
CS Department Ophthalmology, School Medicine, Showa Univ., Tokyo, 142, Japan
SO Ophthalmic Research (1999), 31(6), 407-415
CODEN: OPRSAQ; ISSN: 0030-3747
PB S. Karger AG
DT Journal
LA English
AB Lipid peroxidn. in aliquots of bovine retina (without rod outer segments, ROS), purified ROS, and retinal pigment epithelium (RPE) was initiated with 5 mM ferric iron and 80 mM ADP. After 30 min of oxidn. at 37.degree., the concn. of thiobarbituric-acid-reacting substances (TBARS) which approximates lipid hydroperoxide (LHP), increased in the ROS from 2.0 to 90.2 nmol malondialdehyde (MDA)/mg protein and in the RPE from 0.54 to 51.5 nmol MDA/mg protein. 16 Lipid and aq. antioxidants (AOX) from natural or synthetic sources, including 5 flavonoids, were evaluated for their ability to inhibit the oxidative reaction. Palm-oil-derived vitamin E showed protection in retina, ROS, and RPE (64, 68, and 74%, resp). Of the flavonoids tested, good protection in the retina was found at 10-5 M for epigallocatechin gallate (50%) and at 50 ng/mL for pycnogenol (61%) and catechin (52%). When catechin and palm oil vitamin E, catechin and coenzyme Q10 or coenzyme Q10 and pycnogenol were combined, the individual effect was enhanced. TBARS as an indirect measure of LHP level and Hb-methylene blue detn. for direct LHP were used as alternative end-point detns. of lipid peroxidn. These measure different aspects of AOX reactions. The results demonstrate the usefulness of an in vitro model system that can rapidly and accurately det. the capacity of a single AOX against lipid peroxidn. or be used to show synergistic efficacy.

RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 47 OF 123 CAPLUS COPYRIGHT 2002 ACS

AN 1999:184117 CAPLUS

DN 130:213657

TI Oral liposomal delivery system

IN Keller, Brian C.

PA Biozone Laboratories, Inc., USA

SO PCT Int. Appl., 15 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 9911242 | A1 | 19990311 | WO 1998-US18475 | 19980904 |
| | W: AU, CA, JP | | | | |
| | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | CA 2303200 | AA | 19990311 | CA 1998-2303200 | 19980904 |
| | AU 9892216 | A1 | 19990322 | AU 1998-92216 | 19980904 |
| | EP 1009383 | A1 | 20000621 | EP 1998-944753 | 19980904 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| | JP 2001514209 | T2 | 20010911 | JP 2000-508345 | 19980904 |
| | US 2002039595 | A1 | 20020404 | US 1998-148499 | 19980904 |
| PRAI | US 1997-57819P | P | 19970904 | | |
| | WO 1998-US18475 | W | 19980904 | | |

AB A liposome-capsule dosage unit system for the delivery of a biol. active material is formed by encapsulating a biol. active material in liposomes and then placing the liposome encapsulated material into a capsule. The capsule is typically a soft gel capsule or a two piece capsule capable of tolerating a certain amt. of water. A less water tolerant capsule can be employed if the liposomes are dehydrated prior to placement within the capsule. Biol. active materials include drugs, nutritional supplements, vitamins, minerals, enzymes, hormones, proteins, and polypeptides. The system is esp. suitable for the delivery of materials with poor oral solv., materials that are not absorbed or are poorly absorbed from the gastrointestinal tract, and materials that have conventionally been given by an invasive route. The system can be administered orally, intra-ocularly, intranasally, rectally, or vaginally. Liposomes contg. water 10, cyanocobalamin 0.345, Phospholipon 90H 3, cholesterol 2, vitamin E 1, benzyl alc. 1, propylene glycol 82.655 % were prep'd. using

an

injection method. The liposome mixts. were drawn into a syringe and injected into the open end of soft gelatin capsules, then sealed with tweezers.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 49 OF 123 CAPLUS COPYRIGHT 2002 ACS

AN 1998:542962 CAPLUS

DN 129:166230

TI Compositions and methods for prevention and treatment of vascular degenerative diseases

IN Kosbab, John V.

PA USA

SO PCT Int. Appl., 62 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | WO 9833494 | A1 | 19980806 | WO 1998-US2005 | 19980204 |
| | W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | AU 9861414 | A1 | 19980825 | AU 1998-61414 | 19980204 |
| | EP 1021177 | A1 | 20000726 | EP 1998-906094 | 19980204 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| | JP 2001511153 | T2 | 20010807 | JP 1998-533193 | 19980204 |
| | US 2001031744 | A1 | 20011018 | US 2001-827251 | 20010405 |
| PRAI | US 1997-37084P | P | 19970204 | | |
| | US 1997-43262P | P | 19970417 | | |
| | US 1998-18273 | B1 | 19980204 | | |
| | WO 1998-US2005 | W | 19980204 | | |
| AB | This invention relates to nutrient and therapeutic compns. for treatment and prevention of symptoms and disease conditions assocd. with microangiopathy and macroangiopathy and to methods using the compns. In particular, the invention relates to compns. useful in the treatment of diabetic retinopathy and nephropathy, to compns. useful in the treatment of other retinal disorders including macular degeneration and cataracts, to compns. useful in wound healing, to compns. useful for treatment and prevention of neuropathy, to compns. useful for treatment and prevention of cardiovascular disease and to compns. useful for the treatment and prevention of dental and periodontal disorders. An exemplary diabetic compn. contains bilberry ext., Ca (Krebs), chondroitin sulfate, Cr picolinate, Co Q10, Fenugreek seed powder, Flax seed powder, folic acid, linoleic acid, Ginkgo biloba, Gymnema sylvestre, taurine (or homotaurine), grape seed ext., acetyl L-carnitine, lutein, Mg (Krebs), N-acetyl-L-cysteine, pine bark ext., phytosterol complex, K citrate, protamine sulfate, shark cartilage, soy isolate, green tea polyphenols, vitamin A, vitamin B2, vitamin B6, vitamin B12, vitamin C, vitamin E, and Zn (Krebs). | | | | |

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

n/a

L4 ANSWER 62 OF 123 CAPLUS COPYRIGHT 2002 ACS
 AN 1997:155050 CAPLUS
 DN 126:162270
 TI High dosage lutein and zeaxanthin for macula therapy
 IN Howard, Alan Norman; Bone, Richard Andrew; Landrum, John Thomas
 PA Howard Foundation, UK
 SO Brit. UK Pat. Appl., 45 pp.
 CODEN: BAXXDU

DT Patent
 LA English

FAN.CNT 4

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|------------|------|----------|-----------------|----------|
| PI | GB 2301775 | A1 | 19961218 | GB 1996-11967 | 19960607 |
| | GB 2301775 | B2 | 19990804 | | |
| | CA 2224217 | AA | 19961219 | CA 1996-2224217 | 19960607 |
| | US 6218436 | B1 | 20010417 | US 1996-774052 | 19961223 |

| | | | |
|---------------------|-------------|----------------|----------|
| US 2001009926 | A1 20010726 | US 2001-796522 | 20010302 |
| US 6329432 | B2 20011211 | | |
| PRAI US 1995-487627 | A 19950607 | | |
| GB 1996-4221 | A 19960228 | | |
| GB 1993-13266 | A 19930628 | | |
| US 1994-219897 | B2 19940330 | | |
| US 1994-266768 | B2 19940628 | | |
| GB 1996-11967 | A 19960607 | | |
| WO 1996-GB1368 | A2 19960607 | | |
| US 1996-774052 | A2 19961223 | | |

AB The carotenoids lutein and zeaxanthin are used sep. or in combination to treat age-related macular degeneration (AMD). The carotenoids are administered in the form of a pharmaceutical prepn., e.g. capsule or alternatively as a food e.g. a genetically engineered tomato producing enhanced levels of carotenoid. High dosages of lutein and zeaxanthin are needed to ensure high serum levels necessary for take up of the carotenoids by the macula.

L4 ANSWER 74 OF 123 CAPLUS COPYRIGHT 2002 ACS
 AN 1995:773695 CAPLUS
 DN 123:195754
 TI Effect of diabetes and dietary **ubiquinone** supplementation on the post-translational modification of rat lens .beta.L crystallin
 AU Jones, Richard H. V.; Gronboek, Henning; Kunjara, Sirilaksana; Flyvbjerg, Allan
 CS Department of Molecular Pathology, University College London Medical School, London, W1P 6DB, UK
 SO Biochemical and Molecular Medicine (1995), 55(2), 96-104
 CODEN: BMMEF4; ISSN: 1077-3150
 PB Academic
 DT Journal
 LA English
 AB The effect of streptozocin diabetes of 14 days duration on the integrity of lenticular crystallins has been detd. by the measurement of characteristic markers of protein modification in the lens crystallins of rats. Further, the susceptibility of the crystallins to modification has also been detd. by measurement of the same markers after the application of a metal-catalyzed oxidative insult in vitro. The results show that the previously reported increased post-translational modification of lens crystallins in vivo and increased susceptibility to modification in vitro of diabetic crystallins after 21 days of uncontrolled diabetes are also evident after just 14 days of diabetes. Treatment of the diabetic animals with the antioxidant **ubiquinone** by dietary supplementation was unable to prevent the post-translational modifications sustained by the crystallin when subjected to diabetes in vivo or the increase in susceptibility to an in vitro oxidative stress. While the present results support the proposal that cataract formation is initiated by protein post-translational modification factors such as glycation, **ubiquinone** supplementation does not appear to be beneficial in the inhibition of post-translational crystallin modification in diabetic cataractogenesis.

L4 ANSWER 98 OF 123 CAPLUS COPYRIGHT 2002 ACS
 AN 1986:28809 CAPLUS
 DN 104:28809
 TI Experimental studies on antioxidative effect of coenzyme Q10 on the retina

AU Kuwayama, Masami
CS Med. Sch., Nagoya City Univ., Nagoya, 467, Japan
SO Nagoya Medical Journal (1984), 29(3-4), 137-47
CODEN: NMJOAA; ISSN: 0027-7649
DT Journal
LA English
AB The lipid peroxide level in the chick retina was examd. in vitro and in vivo to verify the antioxidative effect of coenzyme Q10 (CoQ10) [303-98-0]. The levels of CoQ10 in the retina, liver, and heart were 8.4,
82.3, and 74.9 .mu.g/g wet wt., resp. In suspensions of retina only, CoQ10 exhibited no antioxidative effects, but in the retina mixed with chick heart mitochondria, CoQ10 showed marked inhibition of lipid peroxidn. as strong as that by dl-.alpha.-tocopherol [2074-53-5]. Thus, CoQ10 can act as an antioxidant in mitochondria, and the antioxidative effect of CoQ10 displays organ specificity. Kittens were administered a high concn. (70%) of O for 48 h from day 3 after birth. In kittens s.c. administered 10 mg of CoQ10 (group A), retinopathy of prematurity (ROP) was detected in 18 of 22 eyes. In kittens receiving an equal vol. of a vehicle placebo (group B), ROP was detected in 13 of 14 eyes. There was no significant difference between groups A and B. In kittens given 5 mg of CoQ10 and 12.5 mg of tocopherol acetate, ROP was seen in only 11 of 46 eyes. In kittens administered an equal vol. of a vehicle placebo and 12.5 mg of tocopherol acetate, ROP was seen in 31 of 38 eyes. The retina in which ROP developed showed a higher level of lipid peroxide than that in the normal retina.

L4 ANSWER 99 OF 123 CAPLUS COPYRIGHT 2002 ACS
AN 1984:604135 CAPLUS
DN 101:204135
TI Antioxidant activity of coenzyme Q10 in the retina.
AU Kuwayama, Masami; Majima, Akio; Takada, Masahiro
CS Med. Sch., Nagoya City Univ., Nagoya, 467, Japan
SO Nippon Ganka Kiyo (1984), 35(5), 866-70
CODEN: NGKYA3; ISSN: 0015-5667
DT Journal
LA Japanese
AB Coenzyme Q10 [303-98-0], an antioxidant, administered at 10 mg/day s.c. for 14 days into cats with retinopathy had no significant therapeutic effects.

L4 ANSWER 101 OF 123 CAPLUS COPYRIGHT 2002 ACS
AN 1982:507690 CAPLUS
DN 97:107690
TI Studies on the effect of coenzyme Q10 against oxidation in the retina
AU Kuwayama, Masami; Majima, Akio; Aritake, Toshiaki
CS Med. Sch., Nagoya City Univ., Nagoya, 467, Japan
SO Nippon Ganka Kiyo (1982), 33(4), 637-41
CODEN: NGKYA3; ISSN: 0015-5667
DT Journal
LA Japanese
AB Coenzyme Q10 (CoQ10), CoQ10 and NADPH, or dL-.alpha.-tocopherol, were administered to the retinas, livers, and hearts of chick embryos on day 14 of gestation in vitro and the lipid peroxide levels in each tissue were then measured. CoQ10 levels in the retinas, livers, and hearts of the chick embryos were detd. by high-speed liq. chromatog. with a UV absorption detector. The presence of CoQ10 or CoQ10 and NADPH did not inhibit the formation of lipid peroxides in the retina. The CoQ10 level in the liver was highest (82.3 .mu.g/g wet wt.), followed by that in the

heart (74.9 $\mu\text{g/g}$ wet wt.). The retina showed an extremely low level (8.4 $\mu\text{g/g}$ wet wt.). The dL- α -tocopherol markedly inhibited the formation of lipid peroxides in the retina, heart, and liver. The administration of CoQ10, CoQ10 and NADPH, or dL- α -tocopherol inhibited the elevation of lipid peroxide levels in the liver and the heart. Thus, the antioxidative effect of CoQ10 showed organ specificity. Accordingly, CoQ10 can serve as an antioxidant in the mitochondrion. Since the CoQ10 level was very low in the retina, this might explain why it is ineffective for the inhibition of retinal lipid peroxidn. when administered in vitro.

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d bib ab 1 2

L12 ANSWER 1 OF 4 USPATFULL
AN 2000:160979 USPATFULL
TI Defined serumfree medical solution for ophthalmology
IN Skelnik, Debra L., Cambridge, MN, United States
PA Bausch & Lomb Surgical, Inc., St. Louis, MO, United States (U.S.
corporation)
PI US 6153582 20001128
AI US 1998-186580 19981105 (9)
DT Utility
FS Granted
EXNAM Primary Examiner: Fay, Zohreh
LREP Jaeger, Hugh D.
CLMN Number of Claims: 41
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 1409
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A defined serumfree medical solution for applications in Ophthalmology,
that contains one or more cell nutrient supplements, and a growth
factor(s) which maintains and enhances the preservation of eye tissues,
including human corneal, retinal and corneal epithelial tissues at low
to physiological temperatures (2.degree. C. to 38.degree. C.). This
solution is composed of a defined aqueous nutrient and electrolyte
solution, supplemented with a glycosaminoglycan(s), a deturgescents
agent(s), an energy source(s), a buffer system(s), an antioxidant(s),
membrane stabilizing agents, an antibiotic(s) and/or antimycotic
agent(s), ATP or energy precursors, nutrient cell supplements,
coenzymes
and enzyme supplements, nucleotide precursors, hormonal supplements,
non-essential amino acids, trace minerals, trace elements and a growth
factor(s).

L12 ANSWER 2 OF 4 USPATFULL
AN 97:14437 USPATFULL
TI Pharmaceutical carrier
IN Morein, Bror, Uppsala, Sweden
L ovgren, Karin, Uppsala, Sweden
PA British Technology Group Limited, London, England (non-U.S.
corporation)
PI US 5603958 19970218
AI US 1995-455403 19950531 (8)
RLI Continuation of Ser. No. US 1994-142377, filed on 30 Mar 1994, now
abandoned
PRAI SE 1991-1665 19910531
DT Utility
FS Granted
EXNAM Primary Examiner: Kishore, Gollamudi S.
LREP Nixon & Vanderhye
CLMN Number of Claims: 19
ECL Exemplary Claim: 1
DRWN 12 Drawing Figure(s); 6 Drawing Page(s)
LN.CNT 923
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention refers to the use of an inert, structure-giving,
deadjuvanated matrix of a complex of a sterol, such as cholesterol, and
one or more saponins as a carrier for the administration of a
pharmaceutically active substance, and a drug carrying particle
comprising said inert structure-giving matrix to which has been

connected a pharmaceutically active substance. The drug carrying particle, delpha, has an annular basic structure which can form spherical nano particles having a size of 30-50 nm and a narrow size distribution.

=> log hold

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

9.37

9.58

FULL ESTIMATED COST

SESSION WILL BE HELD FOR 60 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 14:08:17 ON 19 NOV 2002

L13 ANSWER 12 OF 12 WPIDS (C) 2002 THOMSON DERWENT
AN 1984-104277 [17] WPIDS
DNC C1984-044331
TI Clathrate cpd. of **coenzyme-Q-10** with methyl
beta-cyclodextrin deriv. - has **coenzyme-Q-10** activity
but is soluble in water.
DC B04
PA (ZERI) ZERIA SHINYAKU KOGYO KK
CYC 1
PI JP 59047202 A 19840316 (198417)* 10p
ADT JP 59047202 A JP 1982-157912 19820910
PRAI JP 1982-157912 19820910
AB JP 59047202 A UPAB: 19930925
Water-solubilised (or lyophilised) clathrate cpd. of coenzyme Q10
(CoQ10) with heptakis(2,6-di-O-methyl) -beta-cyclodextrin (DM-beta-CyD)
is
new.

Water solubilisation makes admin. as injection possible. When administered orally, the clathrate cpd. is absorbed well from the digestive organ. It may be used in injections, **eye**-lotions or oral prepns. in improvement of brain metabolism, asthenopia or liver function.

In an example, to a soln. of 100 g DM-beta-CyD in 1 l distilled water

was added 1 g CoQ10 in small portions while dispersing with ultrasonic wave, and the mixt. was stirred at 22 deg.C on a water bath for 4 hrs. in dark. The resulting soln. was filtered through a membrane filter (pore size 0.22 microns) to give 0.1% aq. soln. of the clathrate cpd.
0/0

=> d his

(FILE 'HOME' ENTERED AT 14:04:51 ON 19 NOV 2002)

FILE 'USPATFULL, USPAT2' ENTERED AT 14:05:01 ON 19 NOV 2002
L1 158832 FILE USPATFULL
L2 1735 FILE USPAT2
TOTAL FOR ALL FILES
L3 160567 S OPHTHALMIC OR EYE
L4 6635 FILE USPATFULL
L5 103 FILE USPAT2
TOTAL FOR ALL FILES
L6 6738 S UBIQUINONE OR Q10 OR (COENZYME Q)
L7 457 FILE USPATFULL
L8 9 FILE USPAT2
TOTAL FOR ALL FILES
L9 466 S L6 AND L3
L10 4 FILE USPATFULL
L11 0 FILE USPAT2
TOTAL FOR ALL FILES
L12 4 S L3 (P) L6

FILE 'WPIDS' ENTERED AT 14:09:41 ON 19 NOV 2002
L13 12 S L9

=> log hold

COST IN U.S. DOLLARS

FULL ESTIMATED COST

| SINCE FILE ENTRY | TOTAL SESSION |
|---------------------|------------------|
| 32.18 | 41.76 |

SESSION WILL BE HELD FOR 60 MINUTES
STN I